



**UNITED STATES DEPARTMENT OF COMMERCE  
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/341,505	07/12/99	JACKSON	S MEWE-005

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EXAMINER

MARTIN, J

ART UNIT

PAPER NUMBER

1632

10

DATE MAILED: 10/04/00

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

FILE

# Office Action Summary

Application No.  
09/341,505

Applicant(s)  
Jackson et al.

Examiner  
Jill D. Martin

Group Art Unit  
1632



☒ Responsive to communication(s) filed on Jul 12, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 1 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-16 and 19-28 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☐ Claim(s) \_\_\_\_\_ is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☒ Claims 1-16 and 19-28 are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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***Election/Restrictions***

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in response to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-6, 19, 22, and 25, drawn to an assay method for identifying a compound able to modulate interaction or binding between XRCC4 and DNA ligase IV, and a method for formulating the compound into a pharmaceutical composition.

Group II, claim(s) 7, 15, and 16, drawn to an unidentified agent that is unclassifiable because the claim fails to recite structure characteristics of the agent.

Group III, claim(s) 8-11, drawn to a peptide fragment of DNA ligase IV.

Group IV, claim(s) 13, drawn to a peptide fragment of XRCC4.

Group V, claim(s) 12, drawn to a nucleic acid encoding a peptide of DNA ligase IV.

Group VI, claim(s) 14, drawn to a nucleic acid encoding a peptide fragment of XRCC4.

Group VII, claim(s) 20, 21, 23, 24, 26, and 27, drawn to a method for modulating cellular DNA repair activity by providing an unidentified compound to a cell.

Group VIII, claim(s) 20, 21, 23, 24, 26, and 27, drawn to a method for modulating cellular DNA repair activity by providing a compound which is a nucleic acid to a cell.

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Group IX, claim(s) 20, 21, 23, 24, 26, and 27, drawn to a method for modulating cellular DNA repair activity by providing a compound which is a peptide to a cell.

Group X, claim(s) 28, drawn to a method for screening an individual for a predisposition to a disorder in which DNA repair plays a role.

The inventions listed as Groups I-X do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Groups I-X lack unity of invention because the unidentified compounds, and nucleic acid fragments, and peptide fragments of known origin (Wei et al. Mol. Cell. Biol., 1995) have materially different chemical structures and biological functions and the methods of each Group are materially different and plurally independent because each is practiced with materially different process steps; the process steps are the special technical features which distinguish each method from the others. As such, methods of identifying modulating compounds, using the modulating compounds to inhibit cellular DNA repair, particularly *in vivo*, and diagnosing a predisposition to a cellular DNA repair disorder are materially different methods which require different technical considerations and reagents, particularly therapeutic considerations. Further, methods of gene therapy and peptide therapy require very different therapeutic considerations. Because the process steps do not share the same or a corresponding special technical feature, unity of invention is lacking. Thus, the claims are not so linked by a special technical feature within the meaning of the PCT Rule 13.2 so as to form a single inventive concept.

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Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill Martin whose telephone number is (703)305-2147.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Karen Hauda, can be reached at (703)305-6608.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703)308-0196.

Papers related to this application may be submitted by facsimile transmission. Papers should be faxed via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CM1 Fax Center numbers are (703)308-4242 and (703)305-3014.

A handwritten signature in black ink, appearing to read "Jill D. Martin", is positioned above the printed name and title.

Jill D. Martin  
Patent Examiner  
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